

an angle sufficient to avoid detection of the torso of a person approaching said window.

17. [New] A method of controlling a fast food service window comprising providing an automated window assembly with at least one movable window member;
focusing a proximity sensor upward from below said window;
sensing only upper limbs of a person extended over said proximity sensor,
and
controlling said movable window in response to said proximity sensor.

REMARKS

Figures

As requested by the examiner, copies of the drawings as originally filed are submitted herewith with the request that the examiner approve the proposed drawing changes. Changes are shown in red ink. In Fig. 1, the portion of the access window 15 embedded in the wall 10 has been shown in phantom line. The known structure of a motor 13 and window operator assembly 14 has been added in phantom line. In addition, numerals 13 and 14 and lead lines have been added to identify these structures. The reference numerals 13 and 14 have also been incorporated in the specification for clarity. Reference to these elements was also found in the specification at page 9, line 19 through 23. In particular, an electric motor and belt drive were described. Because of these features added to Fig. 1, the lead line from numeral 21 has been changed to avoid confusion with the operator assembly 14. The lead line from numeral 31 has been extended to contact the fastener. The label "Fig. 2" and arrow in Fig. 1 indicating the direction of observation for Fig. 2 has been deleted. The examiner felt that the label and arrow were unnecessary and potentially confusing. The curved lines at the ends of the lead lines for numerals 10 and 11 have been

removed, and an arrow head added to the lead line of numeral 10 since the wall referenced by that numeral is an extensive structure.

In a previous action, the examiner had expressed concern with the use of the Greek letter "α" (alpha) in Fig. 4. A prior amendment corrected the specification to use the symbol "α" rather than the English transliteration "alpha". It is believed, therefore, that the drawings and specification now conform and that no change to Fig. 4 is required.

In Fig. 5, the label -- (Prior Art) -- has been added and numerals "16" and "17" have been underscored, indicating that the numerals have been placed on the structures to which they refer.

In Fig. 6, unnecessary words have been removed, and a lead line has been added from the label "Background" to the representative box.

The figures with the proposed changes are believed to conform to the drawing requirements and approval of these changes is solicited. Applicants will prepare formal drawings in conformance with approved changes upon allowance of the case.

Section 103 Rejections

The Examiner has rejected claims 1-5, 7, 9 and 10 35 U.S.C. 103(a) as being unpatentable over the admitted prior art figure of 5 in view of Jonsson.

Applicants continue to rely on the affidavits and evidence previously submitted in this case, and request the examiner's continued consideration thereof.

Although Jonsson shows a door with a proximity sensor focused slightly above a horizontal plane, this sensor is still directed to detect the torso of a person approaching the door. Applicants do not believe that this is a "horizontally directed" sensor as understood in this application, as they have explained heretofore. By detecting the arms of an attendant, and not the approaching "person", applicants have found that the number of false openings of a service window can be significantly reduced. This important distinction is clarified in the amended claims which require that the upwardly directed sensors

be "directed to detect an extended arm of a person over said proximity sensor". Jonsson, like other art of record, directs sensors to detect a person approaching a door and at a significant distance in front of the sensors and the door . As stated by Jonsson in Column 2, lines 60-64, the apparatus was intended to send a beam ". . . into a selected region of space from a position on one side of a region of space." [Emphasis added.] Although the center of focus of the detectors in Jonsson may be 30° above horizontal, the half-power region is 45° degrees on each side, thus including the horizontal plane and being directed such that the center of the beam encounters the torso of a person approaching the door. There is, therefore, no suggestion that a proximity sensor should be directed to detect arms extended over the sensor, and not the torso of the person approaching a service window. Claims 1, 2 and 3 should be allowed.

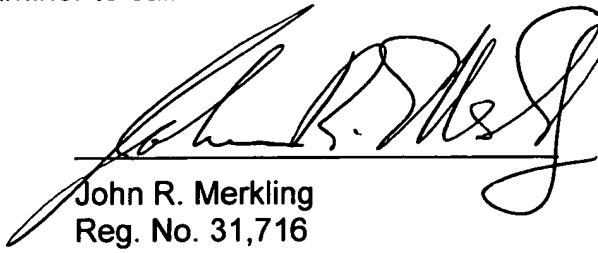
In addition, new claim 17 sets forth a method of controlling a fast food service window which is not suggested by the prior art.

The examiner's consideration of new claims 11 through 16 is also respectfully solicited. Each of these claims is dependant from claim 1. Claim 14 is also dependant from claim 13. It is believed that each of these claims recite additional features not known in the art, beneficial in a fast food service window of the type set forth in claim 1, in particular, a fast food service window having sensors upwardly directed to detect an arm of a person extended over the proximity sensor.

CONCLUSIONS

In view of the above remarks and amendments, the application is now in condition for allowance and the Examiner's prompt action in accordance therewith is respectfully requested. If the examiner feels that a telephone conference would be helpful in advancing the prosecution of this case, the undersigned attorney urges the examiner to call him.

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Date


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